

EXHIBIT A

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Currency for Every Community

ICHI deploys a branded dollar for any cryptocurrency community. This enables retail onboarding, protocol growth, and ecosystem acceleration.

Problem

Every crypto project has three problems it seeks to solve:

1. Getting new users
2. Growing protocol value via token scarcity and value locked
3. Building an ecosystem of businesses supporting their protocol

Solution

ICHI aims to solve all three problems for protocols:

1. **New users:** The greatest obstacle for new protocol users is understanding a protocol's native token and its benefits. Branded Dollars are simple to understand and require users to buy the project's native token in order to mint them.
2. **Growing protocol value:** Branded Dollars are owned by the protocol that creates them and help lock in that project's native assets in a treasury that becomes Protocol Owned Liquidity (POL).
3. **Building an Ecosystem:** DeFi projects are companies with both business and operational needs. Branded Dollars allow these projects to pay for grants, bounties, workers, etc. These tokens remain stable and do not put pressure on the receiving parties to sell them for a more stable asset (as happens when they are paid in native tokens).

ICHI deploys a Decentralized Monetary Authority (**DMA**), a DAO customized **to give any community a branded dollar worth 1 USD**. The Branded Dollar that is created in the process is minted with a community's scarce crypto asset and is capital efficient.

Money functions as a medium of exchange, a unit of account, and a store of value. *It never made sense for one cryptocurrency community to rely on other communities to provide them with a medium of exchange and unit of account.* With ICHI, every cryptocurrency community can fully govern and benefit from their own stable currency.

**Join the Community Website | Telegram | Medium |
Twitter | Discord | Snapshot**

Community Tenets

Core values of the ICHI community

Tenets are the fundamental values that underly every action, decision or move the **community** makes. The ICHI community believes:

1. **We exist to provide member communities with all the benefits of their own currency.**
2. **Voting power derived from ICHI governs ICHI.**
3. **Only the community of each individual project can govern the treasury backing its currency.**
4. **ICHI holders are incentivized to grow member communities.**

Any **community member** may propose a change to a **tenet**. After rigorous debate, the **community** may vote to change, add, or remove a **tenet**. Over time, we will learn better **tenets**.

Community members can participate in governance through Snapshot.

ICHI Governance

Governing the ICHI DAO

ICHI is a DAO (Decentralized Autonomous Organization) governed by the community of ICHI token **stakers**.

Proposals on everything from halvings to partnerships are submitted to the community via Telegram and voting is done on Snapshot.

Separation of Governance: ICHI Protocol vs. oneTokens

ICHI is the governance token of the ichi.org community and platform. It is hard capped at 5M tokens. Each ICHI is a vote on halvings, partnership proposals, allowed oneToken components, oneToken community additions, etc. in exchange for protocol governance rewards.


oneTokens are the governance tokens of each specific oneToken system. Learn more: [oneToken Governance](#)

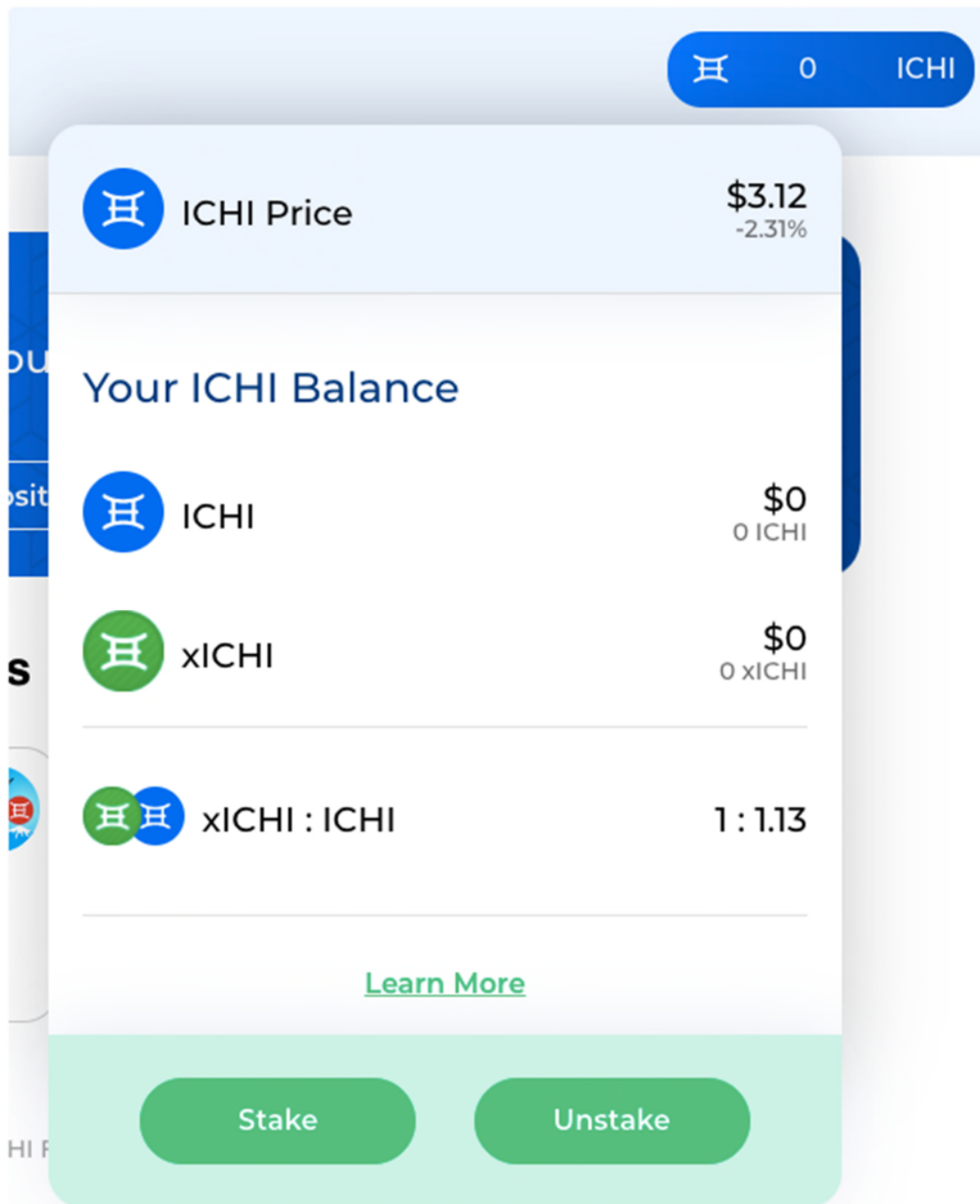
Staked ICHI (xICHI)

Staking ICHI tokens gives stakers:

1. **ICHIpowah** to propose and vote on ICHI governance proposals to determine future features and/or parameters of the ICHI platform as well as protocol improvements, with voting weight calculated in proportion to the tokens staked (the right to vote is restricted solely to voting on features of the ICHI platform; the right to vote does not entitle ICHI holders to vote on the operation and management of any legal entity, their affiliates, or their assets or the disposition of such assets to token holders, and does not constitute any equity interest in any of these entities). The arrangement is not intended to be any form of joint venture or partnership.
2. **Rewards** for participating in governance proposals. It is the community members which would drive development of the ICHI platform, so token incentives would

need to be distributed to compensate them for their time, expertise and effort. Only users who have participated in submission of proposals, commenting, reviewing and/or voting will be entitled to receive ICHI token governance rewards.

 Stake ICHI here by clicking the ICHI dropdown and selecting "Stake".



ICHIpowah

In order to participate in ICHI governance, which includes proposing community initiatives and voting on others' proposals, you must have ICHIpowah. **ICHIpowah** is voting power within the ICHI community. It is calculated by the number of ICHI tokens staked. **xICH I** is minted when you stake ICHI.

Participation Rewards

xlCHI holders can be rewarded by oneToken treasuries by staking ICHI. oneToken treasuries pay 2% management fee and 20% performance reward directly to xlCHI. There is no specified schedule for when payments are made out to xlCHI so an APY will only be available in hindsight. The best way to avoid missing a payment is to keep your ICHI staked in xlCHI.

Rewards to xlCHI holders are announced via Telegram and can be found in the Week In Review (WIR) posts on ICHI's Medium.

Process

How to create a proposal to enact changes within the ICHI community

Proposal submission and voting happen on ICHI's Snapshot. You can view previous proposals, see voting statistics, and vote on open proposals.

Creating a Proposal

Phase 1

Create a Google Doc with detailed proposal including: idea, reasoning for proposal, how this will benefit the ICHI community, possible risks. Once created, post the Google Docs link (enabling comments by community members) to the ICHI Telegram and Discord groups in a message labelled "New Community Proposal: <Google Docs link>".

Phase 2

Discuss with the ICHI community on Telegram and Discord to see if a presentation is needed on a community call. Community calls are an open forum to present and discuss proposals.

Phase 3

Once approved post your proposal will be posted by one of the ICHI Core team members to ICHI's Snapshot for a vote.

Beginner's Guide to Voting

Voting for ICHI proposals

Members of the ICHI community who have staked their ICHI in xICHI and/or provided Liquidity to ICHI Liquidity Pools are eligible to vote on proposals. Stakers and LPs must have their tokens locked in to xICHI or the liquidity pool in an Ethereum block prior the opening of a proposal's voting period.

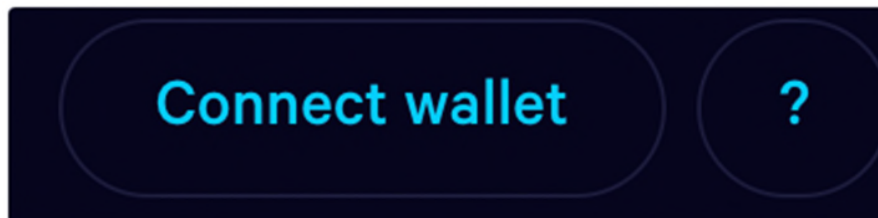


[Stake ICHI here](#)

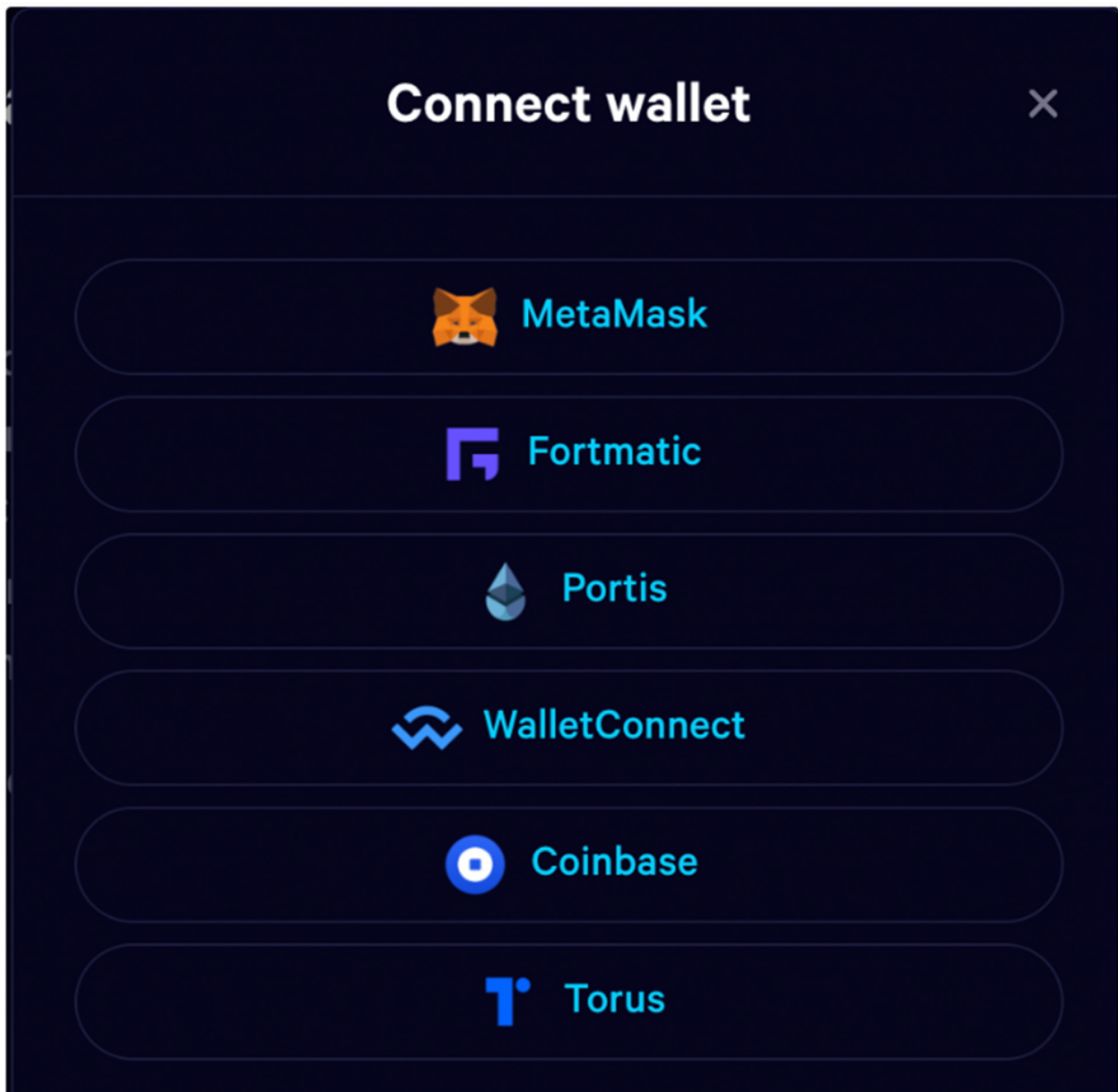
[View ICHI Pools here](#)

Once ICHI is staked in xICHI

- 1.Navigate to ICHI's Snapshot
- 2.Select the open proposal you wish to vote on
- 3.Select "Connect wallet"



- 4.Choose one of the approved Snapshot wallets that you store your xICHI in



Wallets supported by Snapshot

5.Once connected, you will be able to vote from the available options at the bottom of the proposal

*You can change your vote as many times as you wish until the the voting period closes.

Where to Get ICHI

Buying and earning ICHI

ICHI can be:

1. Bought directly on multiple Exchanges
2. Earned through providing services that benefit the entire ecosystem, for example providing liquidity on AMMs / farming on app.ichi.org - Learn more on earning ICHI rewards: ICHI Farms

Current Exchanges that provide opportunities to buy ICHI:

Exchanges

DEXes

SushiSwap

Balancer

Uniswap V2

Bancor

1inch

Loopring (Layer-2)

*Listing proposals may be submitted by an ICHI community member at any time and voted on by the ICHI community.

Liquidity Programs

Earn Rewards for providing Liquidity

You may earn a share of ICHI governance token rewards for staking LP tokens received from providing liquidity to ICHI or depositing oneTokens. Every ICHI token in circulation has been distributed through ICHI's liquidity farming contract. ICHI tokens are distributed every Ethereum mainnet block and are split 50-50 across two types of pools that are eligible for ICHI liquidity rewards:

1. **oneTokens:** ICHI rewards are distributed to oneToken depositors in order to encourage community members to provide liquidity and active governance of specific stablecoins.
2. **ICHI pools:** In order to promote the ICHI platform to a wider audience and for it to function properly, users would need to be incentivized to play the role of liquidity providers and stake their digital assets into the decentralized AMM pools to provide the necessary liquidity for transactions. As compensation for opportunity costs, these liquidity providers which help to promote adoption of the ICHI platform by staking or including assets to liquidity pools in exchange for LP tokens would be rewarded with ICHI tokens, according to each user's relative contribution after various adjustment and correction parameters.

[Click here to view the active oneToken and ICHI pools.](#)

[Click here to view active ICHI.org farms and a step-by-step guide to farming.](#)

Reward Allocations and Halvings change the amount of ICHI rewards that can be earned.

Reward Allocation

ICHI rewards are allocated between pools based on proportional non-ICHI liquidity and proportional minted oneTokens.

ICHI rewards are distributed every Ethereum mainnet block and are split between oneToken depositors and ICHI Pools.

Reward Allocation for oneToken (Stablecoin) Pools

50% of ICHI rewards go to stablecoin pools. These rewards are allocated based on proportion of minted oneTokens.

Reward Allocation for ICHI pools

50% of ICHI rewards go to ICHI liquidity pools. These rewards are allocated based on proportional non-ICHI liquidity contributed to the pool.

Schedule of Changes

Here is the process of making changes in rewards:

1. **Initial Eligibility:** when a compatible pool contains \$20k of non-ICHI liquidity or \$20k in ICHI stablecoins it is eligible for rewards and will be allocated the minimum amount possible.
2. **Reward Adjustment Process:** A measurement week runs from Monday to Sunday. Every Monday, a new reward schedule (based on the previous measurement week) will be posted with the changes scheduled to go live 48 hours later.



Reward adjustments are posted on Mondays in the Week In Review (WIR) posts on Medium.

Downside Protection: A specific pool's reward rate may only adjust down a max of 5% at a time. For example, if the reward rate is 0.2 ICHI per block, the new reward rate may

not be lower than 0.19 ICHI per block. **Scheduled halving events or other community votes are exceptions to this rule.*

Halvings

ICHI Liquidity Rewards are periodically cut in half based on community votes

The only way ICHI tokens are brought into circulation is through Liquidity Rewards. Halvings are events in which ICHI Liquidity Rewards are cut in half. These events happen periodically and are scheduled by community vote.

The current distribution rate of ICHI to ICHI Liquidity Rewards is 0.25 ICHI per Ethereum Block. This will halve to 0.125 ICHI per block after the next halving. **You must claim your ICHI rewards before halving to receive the pre-halving level of rewards.**

Why Halvings

A halving is a way to distribute the dwindling supply of ICHI without ceasing liquidity rewards. The theory of halving works like this: the liquidity reward is halved → half the inflation → lower available supply → higher demand → higher price → liquidity incentive still remains, regardless of smaller rewards, as the value of ICHI is increased in the process.

It is important that the ICHI community agrees on the timing of halvings. ICHI voters who stake ICHI may prefer to halve the reward schedule sooner. ICHI voters who are providing liquidity may prefer to wait longer before halving the reward schedule. By holding a token-weighted vote, every single ICHI that is staked or used as liquidity is able to influence the outcome.

The ICHI community may schedule a halving vote at any time. However, they are typically scheduled about 2-4 weeks after a halving. This gives the ICHI community time to observe the effects of halving and make an informed decision.

Previous Halvings

Date	Ethereum Block	New Liquidity Reward Rate (per block)
------	----------------	--

May 8, 2021	12394000	0.25
February 22, 2021	11908500	0.5

Pools Unaffected by Halvings

A pool-specific reward schedule may be passed by the community. For example, the oneWING-USDC pool received 0.2 ICHI per block for 500k blocks as part of an agreement with wing.finance. This, or similar proposals, may cause a pool to be unaffected by a specific halving.

Deposit

Users are able to deposit Branded Dollars to the ICHI rewards contract and begin earning ICHI rewards in a single step Deposit.

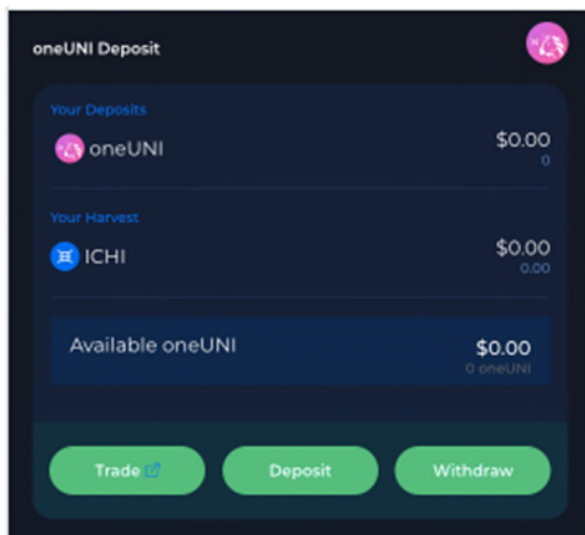
Branded Dollar Deposits are a simple way for Branded Dollar holders to earn ICHI rewards for HODLing their stable assets.

Any Branded Dollar appearing on the Deposits page can be deposited directly to an ICHI-built farming contract to begin earning ICHI rewards.

Users are able to deposit from the ICHI application in a single step without needing to generate or manage LP.

Depositing Branded Dollars

1. Get Branded Dollars either through Minting or by purchasing them on Uniswap v3.
2. Go to the Deposit page and click "Deposit" on your Branded Dollar of choice.
3. Once on the Branded Dollar page, click "Deposit".



4. Add amount, approve, and deposit.

Deposit

Enter Amount

12

Max Amount

Depositing

Available oneUNI

12.00

\$0.00

0 oneUNI

Deposit

✓

Deposit oneTokens here

Farms

ICHI Enables oneToken and ICHI Liquidity Pool Providers an opportunity to farm their LP and earn ICHI rewards

In the words of Masanobu Fukuoka, "The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings." With this in mind, we at ICHI have enabled the ability for our community members to provide liquidity to Liquidity Pools across multiple DEXes in the DeFi ecosystem and use their LP tokens to earn ICHI rewards through yield farming. Below are the different farms available. To see APYs check out ICHI's Farms.

Active ICHI Farms

Farm	Liquidity Pool	Description
ICHI-ETH	ICHI-ETH (Sushi)	ICHI-ETH Pool on SushiSwap
ICHI-1INCH*	ICHI-1INCH (1inch)	ICHI-1INCH Pool (both pool and farm on 1inch)
80/20 ICHI-ETH	ICHI-ETH (Balancer)	Balancer Smart Pool that includes 80% ICHI and 20% ETH
ICHI-BNT	ICHI-BNT (Bancor)	ICHI-BNT Pool on Bancor - single-sided ICHI deposits available
ICHI-ETH	ICHI-ETH (Uniswap)	ICHI-ETH Pool on UniSwap










*Reward schedules based on partnership contracts

Step-by-step Farming Guide

Follow these steps to select a farm and start earning ICHI rewards.

1. Go to <https://app.ichi.org/farm>



2. Select a farm and click the green "Farm/Earn" button. Generally, the farms with higher yields are more risky than the farms with lower yields. Please review the risks section for more details.

Farm ?	Coins	ROI	Liquidity ?	Staked ?	Earnings	
 ICHI-ETH	ICHI WETH	32.67% 2.69% (1m) 0.09% (1d)	\$2,299,094 369,829 ICHI 587 WETH	\$1,699,267	 0 Claim	Farm
 ICHI-BNT	BNT ICHI	45.46% 3.74% (1m) 0.87% (1w)	\$2,249,769 373,969 BNT 360,339 ICHI	\$1,127,861	Updates Coming Soon	Earn
 ICHI-1inch	1INCH ICHI	104.16% 8.56% (1m) 0.29% (1d)	\$1,493,695	\$1,280,810		1INCH 
 80/20 ICHI-ETH	ICHI WETH	26.11% 2.15% (1m) 0.07% (1d)	\$237,719 61,023 ICHI 24 WETH	\$237,718	 7.12 Claim	Farm
 ICHI-ETH	ICHI WETH	29.70% 2.44% (1m) 0.08% (1d)	\$44,849 7,282 ICHI 11 WETH	\$37,567	 0 Claim	Farm


3. There are 3 main actions on a Farm page. They must be done in order to farm:

- Trade - acquire the assets you need to participate in the farm (typically with ETH)
- Add Liquidity - Add the assets to the liquidity pool of choice
- Deposit the LP tokens - Deposit the LP tokens to the farm


ICHI-ETH
(sushi)




Your Deposits

 LP

\$0.00
0


 ICHI

\$0.00
0

 WETH

\$0.00
0


Your Harvest

 ICHI

\$0.00
0.00

Available LP

\$0.00
0 SLP ICHI-ETH

Add Liquidity 

Deposit

Withdraw

Angel Vaults

A Uniswap v3 liquidity management protocol allowing single-sided asset deposits. Created for projects to build a treasury of project owned liquidity and LPs to not need to manage their Uni v3 position

ICHI Angel Vaults combine the rewarding and simple experience of Uniswap V2 with the concentrated liquidity of Uniswap V3. This means that liquidity providers earn more fees without having to actively manage the price ranges of their positions. In addition to providing liquidity providers the opportunity to earn higher trading fees, Angel Vaults also provide a number of features that benefit the projects that establish them, including:

- **Buy Liquidity:** providing single asset liquidity underneath the price of a participating project's token increases the price of that token.
- **Deflationary Liquidity Rewards:** By creating branded dollars through ICHI and then establishing an Angel Vault with that branded dollar, crypto projects can offset the cost of liquidity rewards. This is due to the upward price pressure created from locking the community's scarce token when minting its branded dollar and then using it as the single asset deposited in the Angel Vault.
- **Protocol Owned Liquidity (POL):** depositing a portion of the assets backing that project's branded dollar into the Angel Vault creates sustainable, long-lasting liquidity.

Feature	 Uniswap V2	 Uniswap V3	 Angel Vault	 Angel Vault + Branded Dollar
Fungible Liquidity Token	✓	✗	✓	✓
Concentrated Liquidity	✗	✓	✓	✓
Buy Liquidity	✗	✗	✓	✓
Non-Inflationary Rewards	✗	✗	✗	✓
Protocol Owned Liquidity	✗	✗	✗	✓

The combination of an Angel Vault + a Branded Dollar provides benefits that outweigh those provided to projects and LPs using Uniswap alone.

ICHI's Angel Vaults are the easiest and most cost effective way for projects to increase their liquidity floor, enabling:

- LPs to earn more trading fees with less,
- Liquidity rewards to increase the amount of buy side liquidity without also incentivizing sell pressure,
- The inflationary cost of rewards to be offset by the deflationary minting of the project's branded dollar, and
- Protocols to build assets under management (AUM) backing their branded dollar.

Angel Vault FAQs

Learn more about ICHI's Angel Vaults

What is an Angel Vault?

An Angel Liquidity Vault is a Uniswap v3 liquidity management tool that helps protect a project's token price during market dips.

- *Angel Liquidity Vaults build treasuries of Protocol-Owned Liquidity*
- *Angel Liquidity Vaults allow crypto projects and DeFi users to earn better fees without having to manage their concentrated pool positions*
- *Angel Liquidity Vaults add purchase liquidity to the buy-side of an asset which allows for price protection and generates high income.*

How do Angel Vaults work?

Angel Vaults use Uniswap v3 concentrated liquidity to establish a wall of liquidity directly under the price of a project's token. As the Angel Vault rebalances, a new price floor is established which protects a project's token against a market downturn. It is recommended that a project establishes at least a 15% Angel Vault Deposit to Market Cap ratio to successfully maintain price protection.

Why would a project want an Angel Vault?

They protect your token price and earn revenue!

When an asset has a majority of its liquidity paired with Ethereum, the token becomes exposed to both the upside and downside of \$ETH market volatility. With an Angel Vault, projects are decorrelated from ETH during market downturns. Since the deployment of ICHI's Angel Vault, the \$ICHI price has been supported during a downturn, while still being able to enjoy market upside.

What is the ROI Indicator on the ICHI App and how is it calculated?

ROI is calculated by adding up two factors (1) Vault IRR and (2) Rewards. Vault IRR displays the Uniswap v3 fees generated based on the historical performance of the Vault. (IRR is not a perfect representation of future earnings but stands to illustrate what is likely/has been the case until the current date). Rewards are based on ICHI's weekly reward emissions.

Where can I find the oneUNI<>ICHI pool on Uniswap v3?

<https://info.uniswap.org/#/pools/0x6dedf50966dbef7c5dec3607debe118f28b6bf33>

How many types of tokens are deposited into a Vault?

Only the Deposit Token! Angel Vaults take single-sided deposits (usually of a Branded Dollar) which we call the deposit token. The vault uses the deposit token to provide price protection for the other token in the pool known as the paired token.

How is initial liquidity supplied to the pool?

The Angel Vault uses a Uniswap v3 pool that is made up of the deposit token and the paired token. To start the pool, an initial amount of liquidity is deposited at the creation of the pool and spread across the entire range.

How often do rebalances happen? Are they automated?

Currently rebalances happen about once a week. They are monitored by automated software but manually pinged. This will be a fully automated process in the coming months.

Who rebalances the vault?

At the moment, ICHI governance has been rebalancing vaults for partner projects due to the complexity. In the future, this will be up to the partner project. Partners who choose to rebalance can earn 10% of trading fees to pay for gas and other expenses. Otherwise, they can choose to have ICHI manage the position.

Are Angel Vaults profitable without rewards?

This is dependent on many different factors (ex. Volume, number of rebalances, liquidity). The ICHI UI displays IRR (also known as the univ3 fees earned from trades routed through the vault's liquidity in the pool) for projects that have over 5% of market cap liquidity in their vault.

What are the benefits of using a Branded Dollar in an Angel Vault vs. USDC?

- Branded Dollars offset liquidity rewards provided for Angel Vaults
- Converts TVL into POL through the usage of Treasury funds
- For every \$1 of liquidity added to the vault, \$1.20-1.50 of value is locked for the protocol (due to over-collateralization)
- Branded Dollar DMA technology provides a project with its own over-collateralized stable asset. This collateral can be managed and put to work across DeFi.

HODL Vaults

A Uniswap v3 liquidity management protocol enabling users to deposit and accumulate more of their favorite project's tokens.

HODL Vaults are a Uniswap v3 liquidity management protocol that allow projects to create single-sided liquidity pools with their native tokens. Projects and DeFi users can deposit a crypto asset and earn more of their deposited asset as the pool generates trading fees and the price of \$ICHI increases.

DeFi users benefit by being able to provide liquidity of their favorite tokens while earning high yields thanks to Uniswap v3's concentrated liquidity. Pool positions are automatically managed by ICHI so users do not have to worry about extra gas fees or spending time actively managing their positions on Uniswap.

[Deposit to HODL Vaults here](#)

FAQ

1. **What is the *IRR* Indicator on the ICHI App and how is it calculated?**

A: IRR refers to the returns from the Vault liquidity. Vault IRR displays the past performance (since its inception) of the Vault which illustrates the returns made from Uniswap v3 fees earned and liquidity growth. Due to the fact that it takes into account the past performance of the vault, it is not a perfect representation of future earnings but stands to illustrate what is likely/has been the case until the current date.

Uniswap V3

Leveraging Uniswap V3 for efficient liquidity provision

ICHI oneTokens will dedicate a portion of their treasuries to provide liquidity on Uniswap V3 instead of just relying on individual liquidity providers (LPs). This Uniswap V3 position will be maintained via DMA helper contracts. This will enable larger trades and a tighter peg to \$1 than current approaches because Uniswap V3 stablecoin pairs are efficient at facilitating a large volume of transactions with a low amount of total value locked (TVL).

Decentralized Monetary Authority (DMA)

Decentralized management of currency for any community

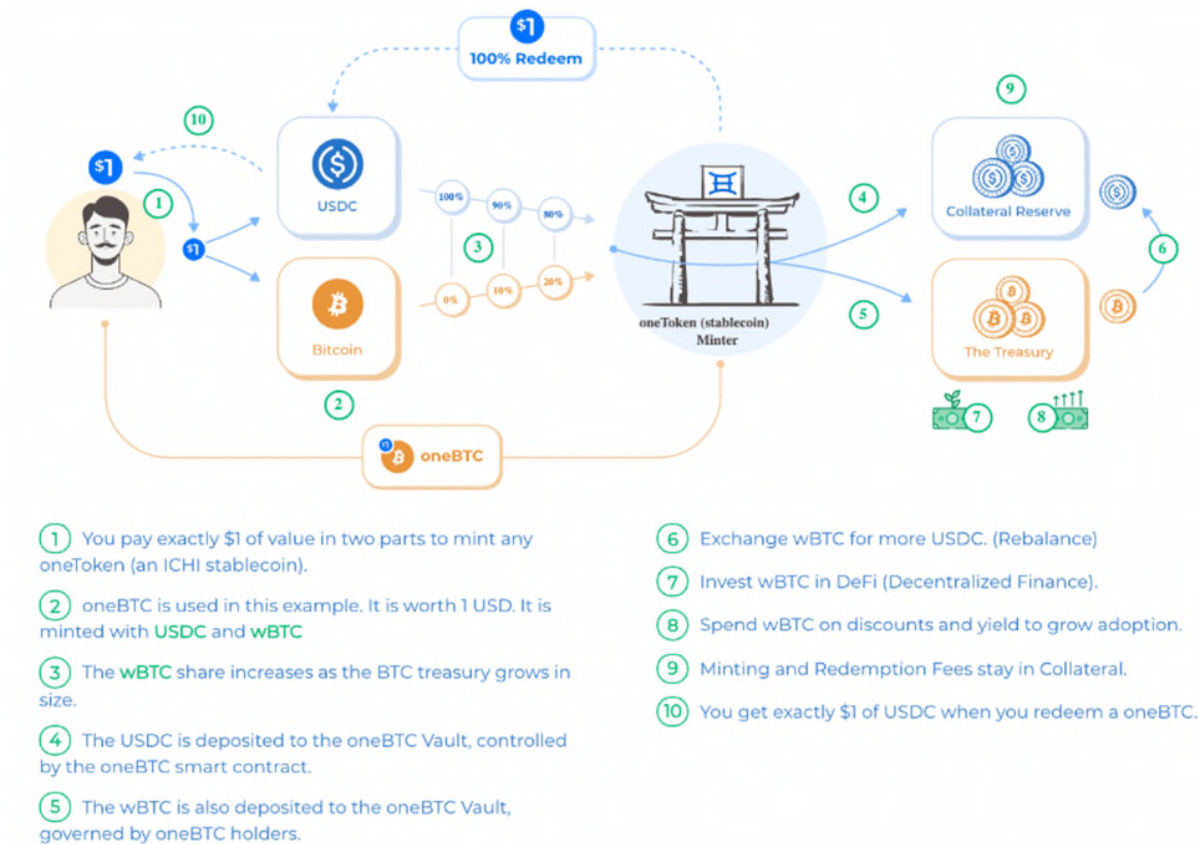
oneTokens are ICHI designed stablecoins built for cryptocurrency communities. oneTokens keep their value at \$1, are purely on-chain, and are supported by a community treasury in each oneToken's native project tokens. They provide the hard peg of centralized stablecoins without sacrificing on decentralization.

ICHI enables any community to deploy a project **Decentralized Monetary Authority (DMA)** to manage their oneToken.

Table 1: Feature Comparison by Category of Stablecoin

Feature	Algorithmic	Fiat Backed	Crypto Backed	ICHI Stablecoins
Mint for Exactly \$1	No	Yes	No	Yes
Redeem for Exactly \$1	No	Yes	No	Yes
100% On-Chain Reserves	Yes	No	Yes	Yes
Community Treasury	No	No	No	Yes
Liquidation Risk	No	No	Yes	No

How it works



The DMA Model

DMA Benefits

Capital Efficient

While other stablecoins insist that a minter take out a debt position or over collateralize their position 2X or more, ICHI's oneTokens do not. oneTokens enable minters to deposit exactly 1 USD of value into the minter and receive 1 USD in value back. This is never a debt position and does not pose the risk of being liquidated.

Decentralized

While being stablecoins, oneTokens provide an additional benefit to holders. They provide holders voting power over the project Community Treasury which holds the scarce crypto assets and can be strategically deployed based on community governance.

Growth Enabling

Existing stablecoins remove value from cryptocurrencies that have to be sold to mint coins (much like selling a stock decreases the value of that stock). ICHI solves this problem and provides the benefits of fiat coins like USDC and USDT without the trade-offs. This is done through minting stablecoins in two parts: 1-part USD hard pegged stablecoin, 1-part community scarce crypto (project token). The scarce crypto is then locked in a Community Treasury, removing it from circulation and applying upward price pressure on the asset.

100% on-chain

Being 100% on-chain, oneTokens provides **transparency** that other stablecoins do not. This means anyone can see the USDC collateral and the coins paid to mint oneTokens on the Ethereum blockchain. Additionally, the entire transaction history of minting, redeeming, and any treasury actions are visible. If the coins or USDC are used by the coin's community to create DeFi (decentralized finance) positions, anyone interested is able to see these transactions and positions in the corresponding smart contracts.

Minting

Mint stablecoins for exactly \$1 of value per stablecoin by sending project tokens and USDC.

oneTokens are minted by you with your non-hosted Ethereum wallet through the DMA. There is no issuing entity, bank, or any other counterparty. You pay exactly \$1 of value in two parts to mint a oneToken:

1. A USD hard pegged stablecoin deposited to the oneToken's Collateral Reserve
2. The oneToken's native project tokens (ie, wBTC) which is deposited to a Community Treasury

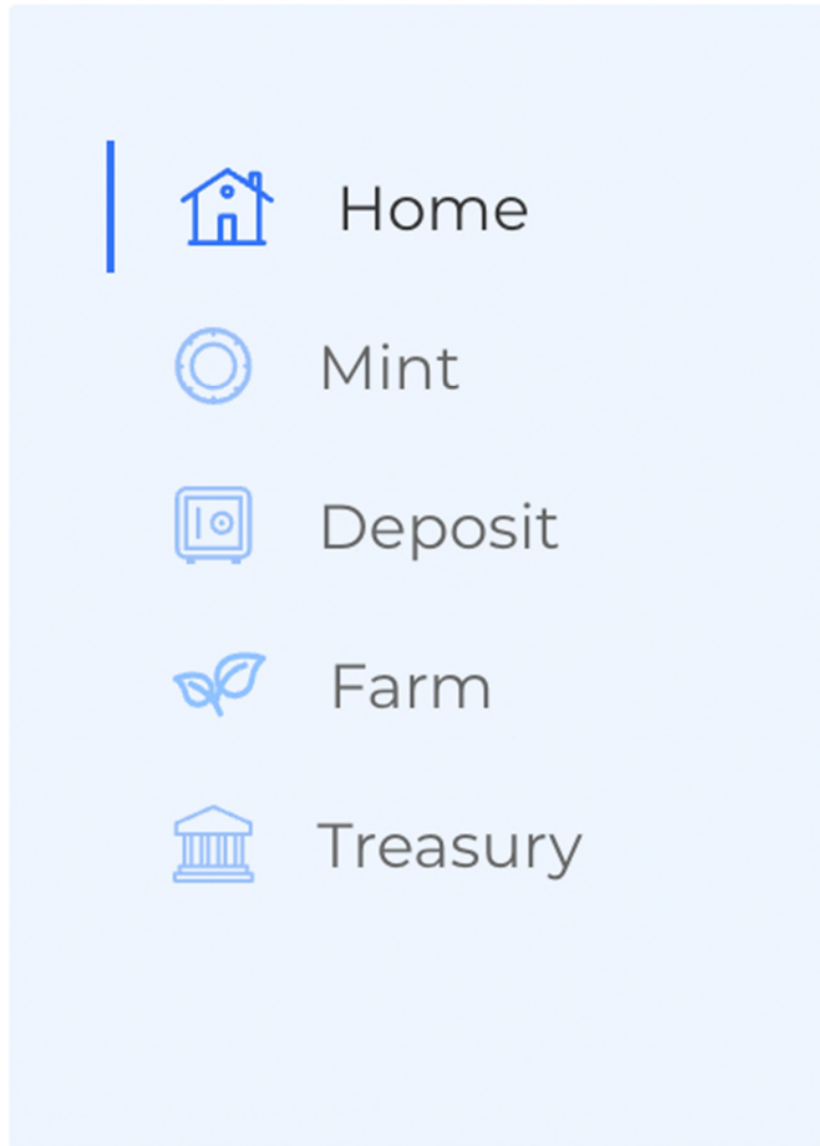
A **minting ratio** specifies how much USD hard pegged stablecoin and how much of the oneToken's cryptocurrency you pay to mint a oneToken. For example, you pay \$0.90 USDC and \$0.10 wBTC to mint oneBTC (the stablecoin for Bitcoin) at a 90% minting ratio.

Follow these steps to mint ICHI stablecoins

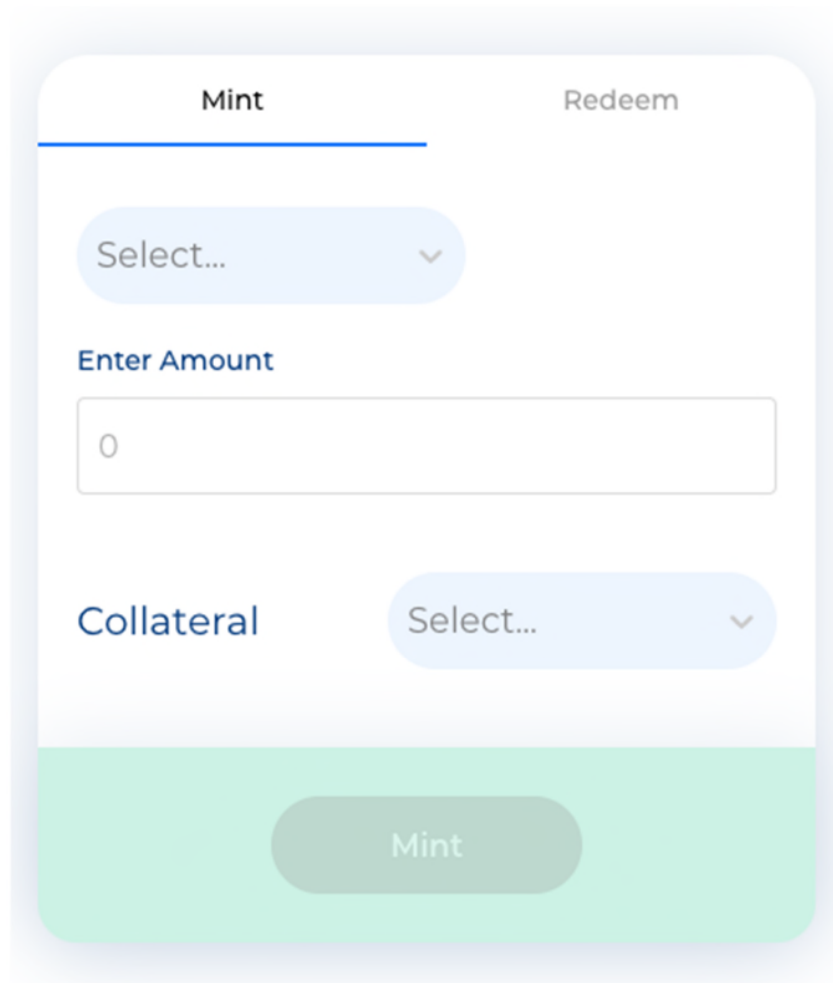
1. Head over to <https://app.ichi.org/>
2. Connect your Ethereum Wallet by clicking the "Connect Wallet" button on the top right of the page. If you are new to Ethereum, go here to learn about Ethereum wallets: <https://ethereum.org/en/wallets/>



3. Once your wallet is connected, click the "Mint" button on the left-hand side of the page

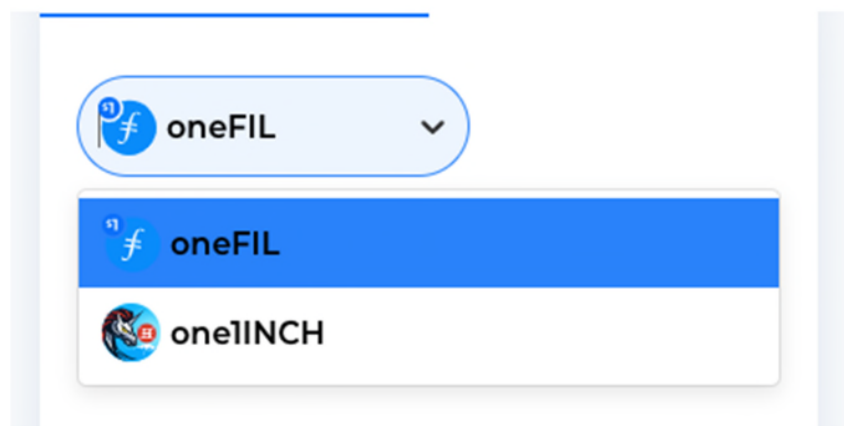


4. Once on the Mint page, make sure the "Mint" tab is selected



The screenshot shows a mobile application interface for minting. At the top, there are two tabs: "Mint" and "Redeem". The "Mint" tab is selected, indicated by a blue underline. Below the tabs, there is a dropdown menu with the text "Select..." and a downward arrow. Underneath this is a label "Enter Amount" followed by a text input field containing the number "0". Below the input field is a label "Collateral" followed by another dropdown menu with the text "Select..." and a downward arrow. At the bottom of the form is a large green button with the text "Mint".

4. Select a stablecoin to mint



The screenshot shows a dropdown menu for selecting a coin to mint. The menu is open, displaying two options. The first option is "oneFIL" with a blue icon featuring a stylized "f" and a superscript "1". The second option is "one1INCH" with a blue icon featuring a stylized "1" and a superscript "1". The "oneFIL" option is highlighted with a blue background.

5. Enter an amount to mint.

Enter Amount

100

6. Click "Approve" to approve the scarce crypto you plan to deposit in conjunction with USDC for minting (you will only do this on your first time minting a specific stablecoin)

Approve renFIL

7. Sign the transaction in your Ethereum wallet.
8. Click Mint to send the transaction to your Ethereum wallet

Mint

9. Again, sign the transaction in your Ethereum wallet.

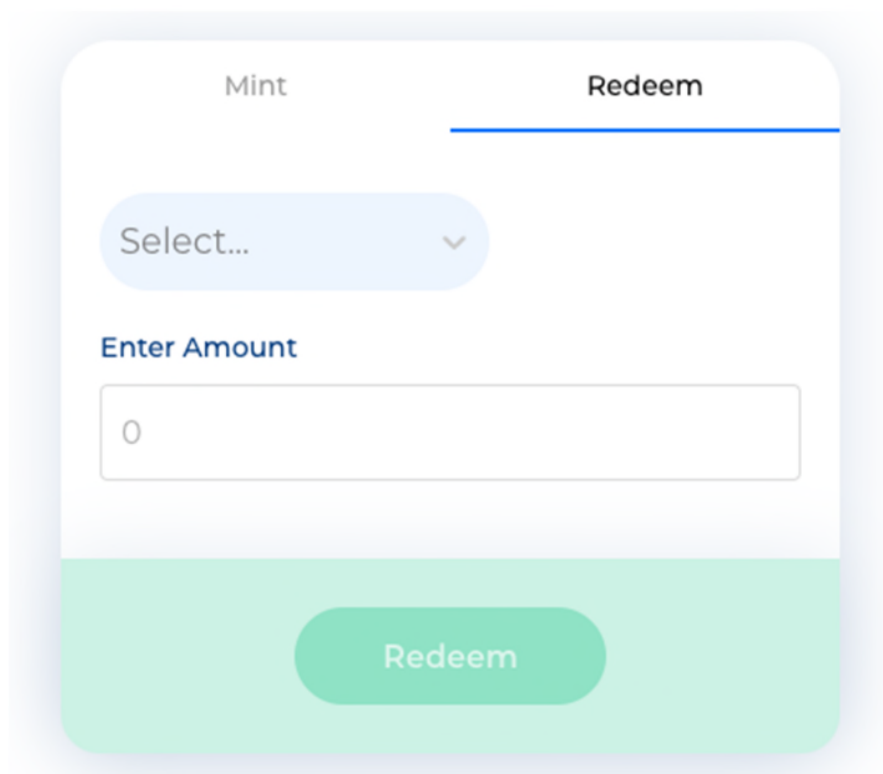
Redemption

Redeem oneTokens for exactly \$1

Each oneToken (ie, oneBTC) can be redeemed for exactly 1 USDC (or other USD hard pegged stablecoin in the Collateral Reserve), less a redemption fee. A oneToken redemption can only come from the Collateral Reserve. The cryptocurrency paid to mint isn't repaid to any token holder by the system. Instead, it remains in a Community Treasury and each oneToken is a vote in deciding how to manage the community treasury.

Follow these steps to redeem ICHI stablecoins

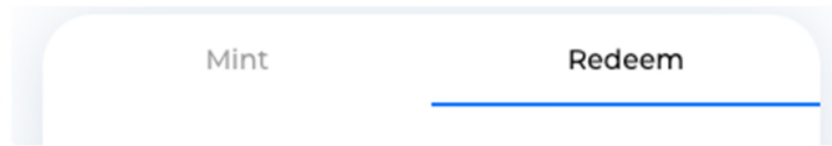
1. Go to <https://ichi.farm/#/mint> to see the Minter in Figure 1.



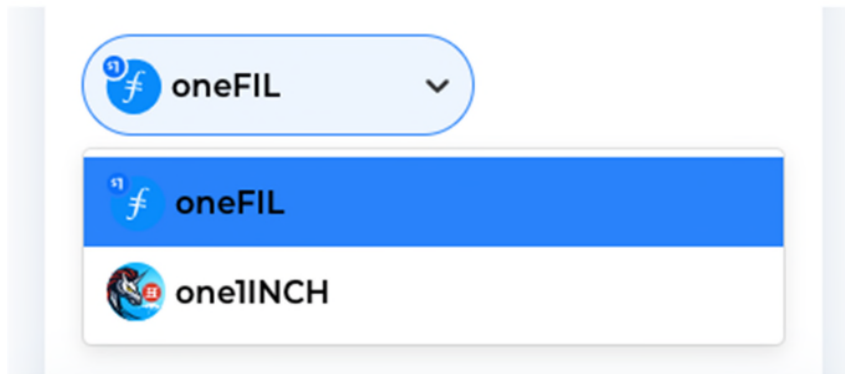
The screenshot shows a web interface for minting and redeeming tokens. At the top, there are two tabs: 'Mint' and 'Redeem'. The 'Redeem' tab is selected, indicated by a blue underline. Below the tabs, there is a dropdown menu with the text 'Select...' and a downward arrow. Underneath the dropdown, the text 'Enter Amount' is displayed in blue. Below this text is a text input field containing the number '0'. At the bottom of the interface, there is a large green button with the text 'Redeem' in white.

2. Connect your Ethereum Wallet. If you are new to Ethereum, go here to learn about Ethereum wallets: <https://ethereum.org/en/wallets/>

3. Click Redeem



4. Choose a stablecoin to redeem



5. Enter an amount to redeem

Enter Amount

6. Click Redeem to Redeem to USDC

7. Sign the transaction in your Ethereum wallet


Collateral Reserve

oneToken's USD hard pegged stablecoin Collateral Reserve

There are two types of reserves backing an ICHI stablecoin: the USD hard pegged stablecoin known as collateral stored in **Collateral Reserve** and the native project tokens stored in the community treasury. Each of these reserve assets are visible on-chain and managed via the DMA.

Collateral Reserve

1. Contains only stablecoins
2. May be deployed in various principal protecting strategies
3. Can be managed via Community Governance

 Upon redemption of a oneToken, you may claim \$1 of collateral reserves while supplies last. oneTokens can accept multiple stablecoins for Collateral. Therefore, the amount of each stablecoin is an upper limit of how much can be redeemed of that specific stablecoin. E.g. If the contract accepts USDC or USDT as Collateral then the user may be forced to accept multiple stablecoins when redeeming if their oneToken holdings are larger than the Collateral of a single stablecoin.


Community Treasury

Native project token backed community Treasury

When minting a oneToken, you pay \$1 in value in a mixture of USD hard pegged stablecoin and the oneToken's specific native project token. The native project tokens remain in a **Community Treasury** because redeeming oneTokens will only return stablecoins from the Collateral Reserve. The oneToken community (oneToken holders) decides what to do with this treasury by voting with the stablecoin itself. Each stablecoin held represents a vote that decides what actions to take with the cryptocurrency paid to mint stablecoins. Proposals may include the following actions:

- Selling coins to buy more USDC and deposit it to the collateral
- Allocating the coins in DeFi (decentralized finance) contracts and receiving yield
- Paying adoption incentives for users to spend or save the stablecoin
- Paying grants to build applications and systems that support the stablecoin

This is not an exhaustive list. The community may propose and vote on any proposal.

 Go to <https://app.ichi.org/treasury> to view the current treasuries and collateral reserves for each stablecoin.

Treasury Reserve Ratio

The Treasury Reserve Ratio shows how 'over-collateralized' a oneToken is. This happens when the dollar amount of the sum of the USDC collateral and the community treasury is more than the number of circulating stablecoins. The possible drivers of over-collateralization may include the following:

- Minting and/or redemption fees stay in USDC reserves.
- Coins paid to mint are not paid back when you redeem and may grow in value.
- Anyone can send coins into the community treasury.
- Anyone can send USDC into the USDC reserves, including the community treasury.

- USDC reserves and/or coins may be deployed by that in yield-bearing third party DeFi positions by that oneToken project community.
- The stablecoin may be minted with a yield bearing coin.

This is not an exhaustive list and the implementation of some (or all) of these drivers is determined by coin's community.

Treasury Positions

A oneToken's treasury can be used on any proposal passed by the holders of that oneToken and in capital deployment strategies built by and voted for by the oneToken community. An example of actions a oneToken community could take to build their Community Treasury:

1. Contribute liquidity to ICHI stablecoin pools, receive ICHI rewards,
2. Pair ICHI with treasury asset, provide to ICHI liquidity pools, receive more ICHI rewards,
3. Re-allocate to other protocols and in systems to drive adoption,
4. Provide better interest when saving, increasing oneToken adoption, and
5. Provide discounts when spending, increasing oneToken adoption

These strategies can be used to solve the pains of specific crypto projects. An example is wing.finance's reason for wanting a oneToken and their use of oneWING to within their protocol to drive adoption.

Core Technical Concepts

Technical overview of a Decentralized Monetary Authority

This section will discuss the technical building blocks of Decentralized Monetary Authorities including their modular design, architectural components (which can be customized for each oneToken community) that enable the system to function, and the inheritance map of the oneToken interface. The code for ICHI and oneTokens is open-source and can be found by going to ICHI's GitHub page.

Modularity

A key principle of ICHI's architectural design is Modularity. The ICHI platform allows for components to be modular (similar to a microservices architecture) in order to allow for simplified and safe updates/upgrades when certain logic within contracts need to be changed. Additionally, the platform has certain components that are meant to be permanent, yet can be upgraded through a Proxy process. This allows ICHI to be simple and safe to upgrade as well as customizable (as it pertains to oneToken implementations). It increases separation of concerns, enables code reuse, and gives clarity into which jurisdiction applies to each guarded function.

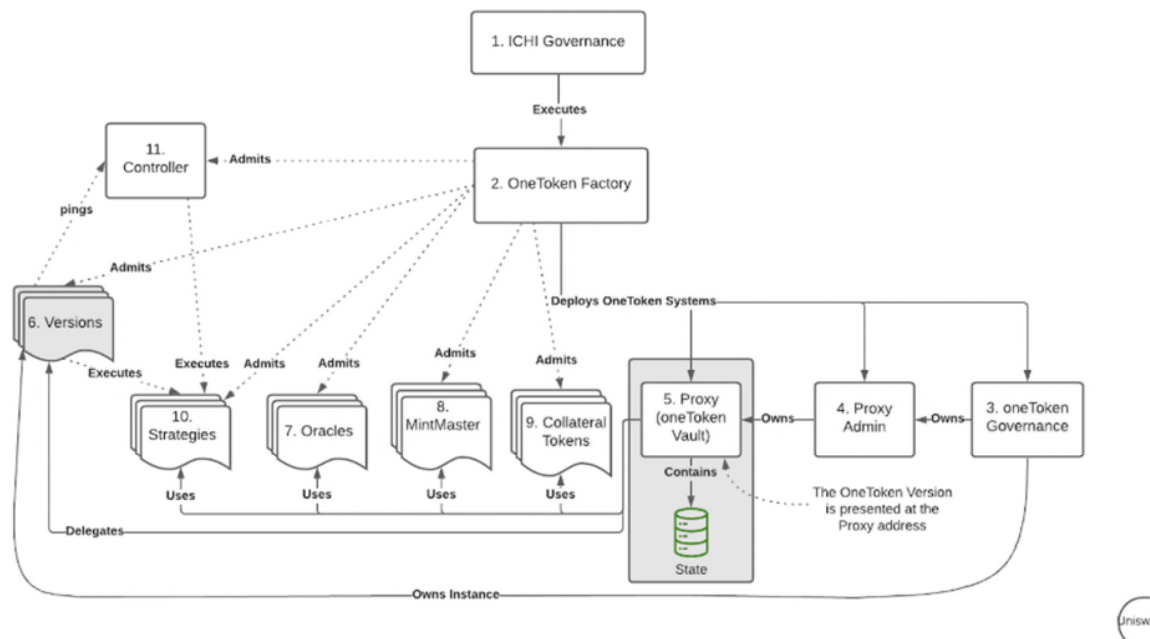
Architectural Components

Component	Function
ICHI Governance	Global governance controls the oneTokenFactory and manages global parameters. Governance itself is external to the oneToken system.
oneToken Factory	A contract that acts as a oneToken deployment mechanism. Global (ICHI) state information is stored and managed in this system-wide hub.
oneToken Governance	Governance of specific oneToken instances with user votes weighted by their holdings of the corresponding oneTokens in specific liquidity pools.

	oneTokenGovernance can replace oneToken modules or upgrade the core contract using the Proxy pattern.
Proxy Upgrade System	A system for upgrading smart contracts. It includes an Owner, Proxy Admin, and Proxy.
oneToken Vault	The core upgradeable (through a Proxy upgrade) contract owned by oneToken Governance that holds assets, mints and burns ERC20 tokens, and controls the process flow during the minting and redemption process, including coordinating modularized components.
Versions	oneToken Vault implementations that are published by deployers and admitted to the network by ICHI Governance. oneToken Governance can optionally adopt (upgrade, downgrade) an approved version of the oneTokenVault.
Oracles	Price feed modules that report the value of assets in the oneToken Vault through a normalized interface. The oneToken Vault passes Oracle price conclusions and volatility signals to Mint Master modules.
MintMaster	A Mint Master uses any available information to compute the current minting ratio. The Minting Ratio adjusts over time to maintain the exchange rate peg of a oneToken to 1 USD. The interface includes a maximum transaction volume figure (can be infinite) to accommodate anticipated future logic requirements. Since the rate can be up to 100% and the maximum volume can be as low as zero, the Mint Master can be a circuit-breaker if so desired. Oracles report volatility. MintMasters decide what to do.
Collateral Tokens	0-n stablecoins that are accepted in tandem with Member Tokens at the Minting Ratio, by the oneToken Vaults. Upon redemption of oneTokens, oneToken Vaults burn the oneTokens in return for stablecoins of equal value (Collateral Tokens). Since more than one kind of

	stablecoin can exist in the oneToken Vault at any given time, multiple stablecoin options can be given upon redemption. While there will likely be sufficient Collateral to back all outstanding oneTokens, each specific stablecoin is redeemable on a "while supplies last" basis.
Strategies	Trading contracts that invest funds in yield-farming contracts, receive other types of tokens and report balances of each type of token they hold. A Strategy interfaces with a oneToken contract through the Controller. The interface to the Controller defines the minimum viable requirements to be a compatible contract. Strategies will be admitted via the ICHI Governance and selected by oneToken Governance.
Controller	A global contract that executes the appointed strategies for a given oneToken Vault at the specified period of time. The Controller also implements system-wide invariants such as enforcing conservation of value or allowable fees/slippage rules.

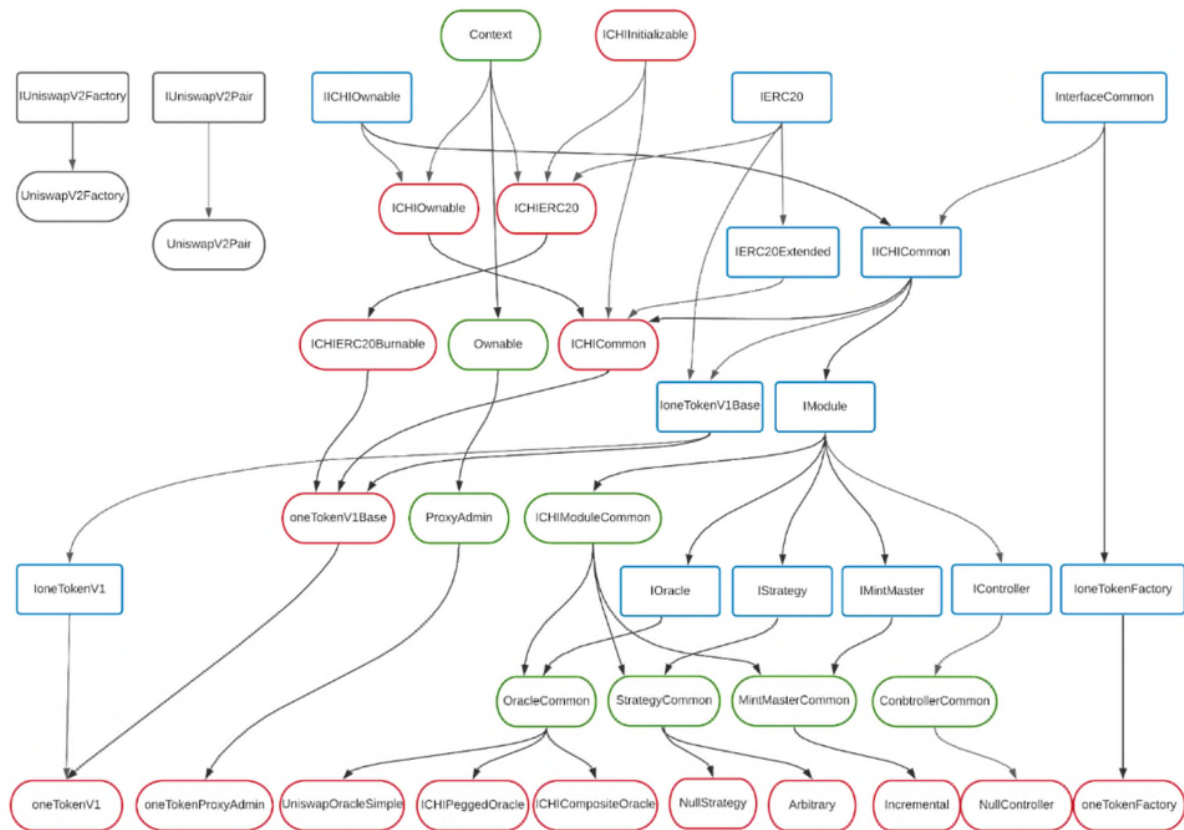
The figure below provides a view of how each of the components in the oneToken system are deployed and what contract owns/admits each component.



oneToken Component Interaction

Inheritance Map

ICHI and the oneToken Factory were designed with Replaceable Modules to allow for flexibility and customization. With this in mind, we created the system to abide by a structured inheritance tree that contains specific interfaces. These interfaces provide guidelines and structure for each upgradable component in the system and ensure that once approved, these components are standardized for simple plug and play capabilities. The figure below shows the overall inheritance map of the ICHI and oneToken systems with each shape representing a Solidity contract that is either an Interface or an implementation contract.



Inheritance Map of original implementation of the oneToken Factory

i Color Key:
Blue Squares: Interface
Green Oval: Abstract
Red Oval: Contract

Governance

oneToken Governance, technical overview

Within the ICHI system we divide governance into two sections based on scope of authority. Both sections rely on the same voting code (in separate instances) that enables voting rights based on tokens staked. The sections are divided into:

1. Global (ICHI) Governance
2. Local/Instance (oneToken) Governance

ICHI Governance

ICHI Governance is the system's overall governance which we refer to as "global". It is the highest level of authority and thus has the largest scope. It provides boundaries inside of which the oneToken Governance instances can function to govern their oneToken community-backed Collateral and Treasury. ICHI Governance is responsible for admission control as it pertains to:

1. Accepting the creation of a new oneToken species, its initial configuration and its corresponding Community Governance contract.
2. Adding a new Collateral Token to the list of "like kind" Collateral Tokens available in the Collateral Reserve for oneToken holders.
3. Adding and removing implementation versions.
4. Adding Oracle, MintMaster, Controller, and Strategy implementations.

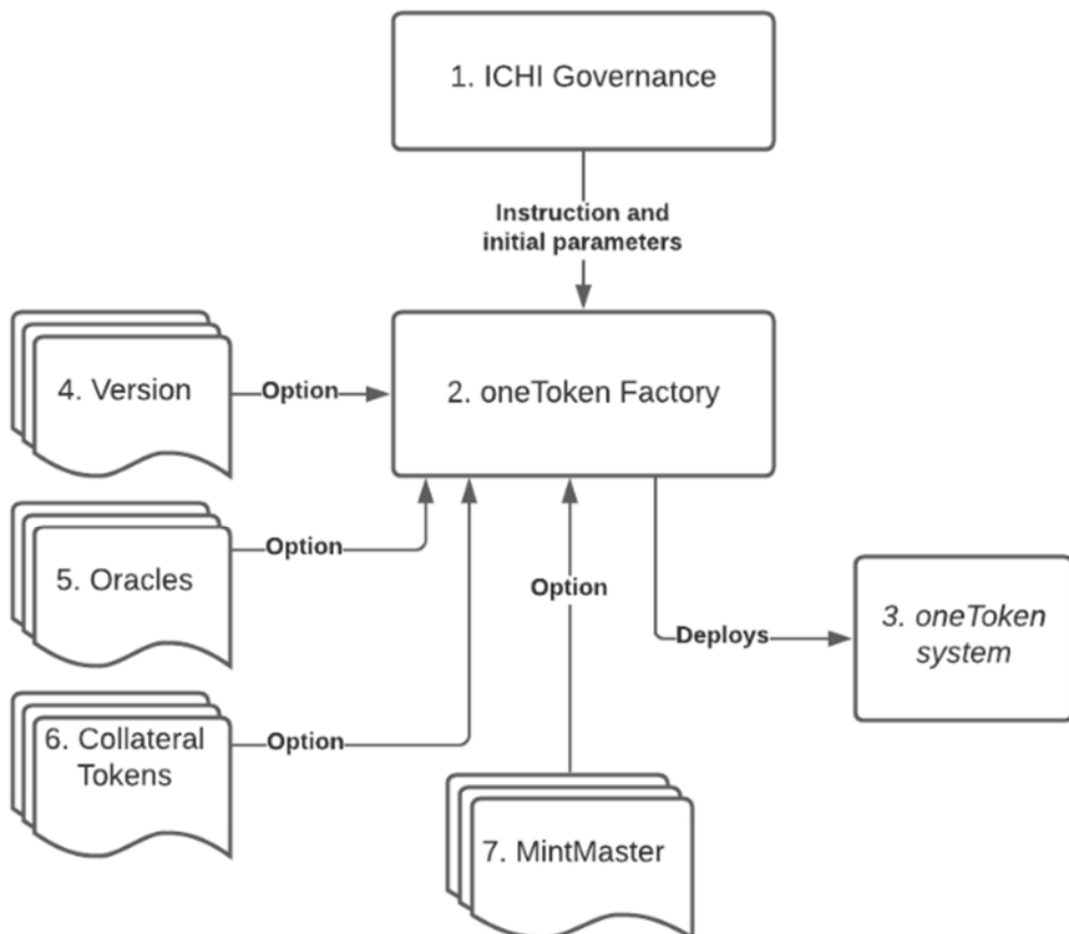
Key components include

1. **Versions:** oneToken implementations.
2. **Oracles:** Price aggregators for each token in the Community Treasury and Collateral.
3. **MintMaster:** sets the Minting Ratio.
4. **Collateral Tokens:** USD hard pegged stablecoins accepted and emitted in the Minting and Redemption processes.
5. **Strategies:** Modular contracts purpose-built for deploying Collateral and Community Treasury funds.

Deployments

ICHI Governance also deploys oneToken implementations. It does so by specifying an initial configuration from the available predetermined options. This is done through the following steps:

1. ICHI Governance includes the initial oneToken configuration and instructs the oneToken Factory to deploy a new oneToken contract.
2. The oneToken Factory (owned by the ICHI Governance contract) validates the input including confirmation that only a pre-approved implementation Version, Oracles and Collateral are specified.
3. The oneToken factory deploys the oneToken instance and the system of contracts is ready for service.




Components used in deploying oneTokens

oneToken Governance

oneToken Governance is akin to local or community governance. Each oneToken instance has its own community-led governance with the ability to decide on customized implementations of system components that are whitelisted by ICHI Governance. oneToken Governance is implemented as an address which can be an EOA (Externally Owned Account), multisig, or on-chain governance contract capable of emitting bytecode. Important issues that oneToken governance deals with include:

1. Adjusting the Minting Minimum/Maximum or absolute Ratio for new minted oneTokens when using the Incremental implementation of the MintMaster, or working with other parameters chosen modules require.
2. Adjusting the type of Collateral used, e.g. change USDC to DAI or a combination of both.
3. Executing Community Treasury operations

 Each oneToken is a vote on treasury allocations, specific stablecoins parameters (like minting and redeeming fees), and on adoption programs.

Treasury Governance

Management of oneToken Treasuries

Managing the oneToken Treasury is a unique capability ICHI provides for its oneToken users. oneToken Governance can manage funds for both Collateral Reserve and the Community Treasury. This can be enabled for any oneToken community. Treasury management operations include:

1. Exchanging one type of token in the Community Treasury for another
2. Allocating project tokens in the Community Treasury in Staking and Farming operations
3. Allocating project tokens and other non-collateral assets across a variety of whitelisted DeFi opportunities
4. Allocating Collateral Assets in principle preserving, whitelisted opportunities across DeFi

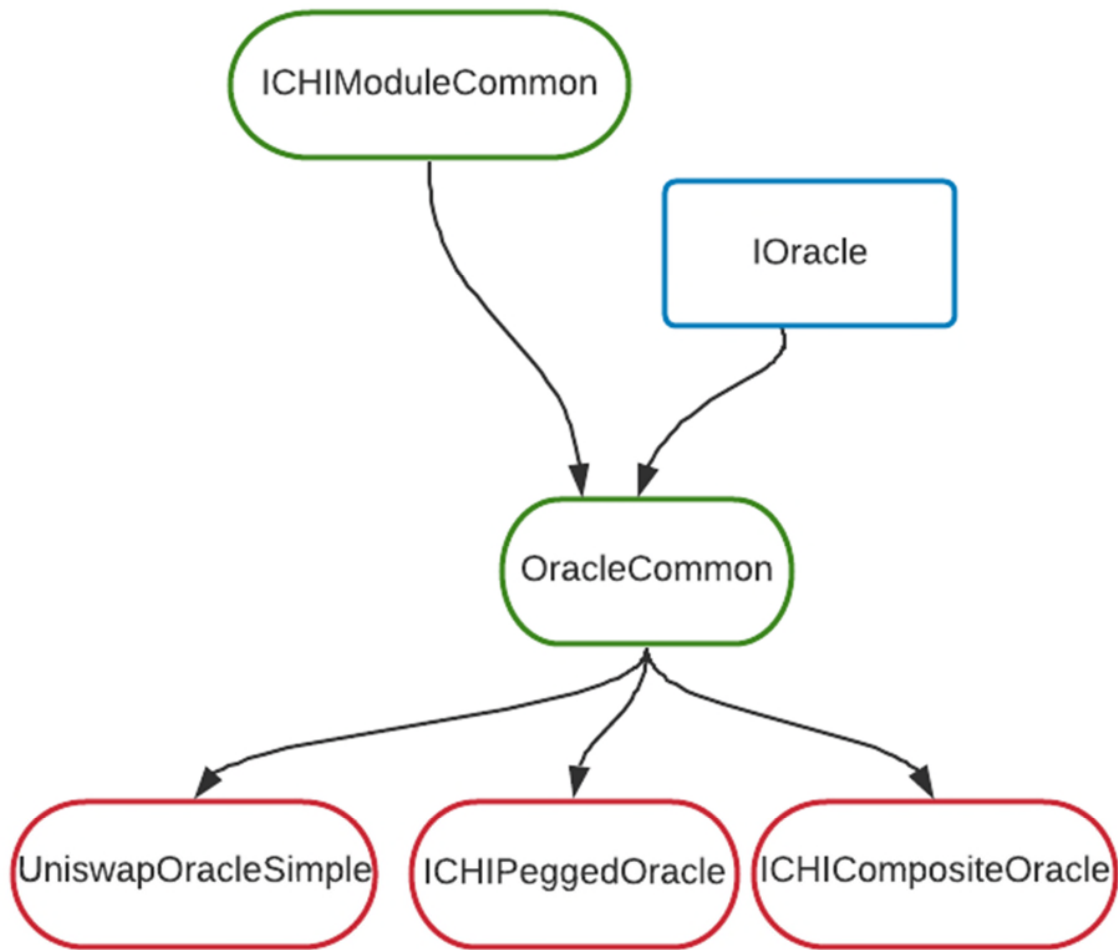
This is flexible. In essence, this means that the oneToken Vault (holding both the Collateral Reserve and the Community Treasury) can do almost anything an EOA can do. By extension, that means participation in any third party DeFi protocols is completely possible as oneToken Governance sees fit from time to time. These actions can be automated through the implementation of Strategies.

Oracles

oneToken price feeds

Oracles are price feed modules that report the value of assets in the oneToken Vault through a normalized interface. In the ICHI and oneToken system, Oracles are used for providing price feeds for project tokens, Collateral Tokens, and oneTokens. Price Oracles are vital to the correct operation of the system and are chosen based on preference for price feed source, interpretation (e.g. smoothing), and volatility-detection logic.

oneToken Oracles are structured in a reusable fashion. As Replaceable Modules, we expect Oracles to evolve and be customized towards the oneTokens they will be used for so the system assumes nothing about the operation of the Oracle itself. Instead, we define a normalized interface so that new implementations can be wrapped and used to report back the results of inspecting external sources. The figure below shows how the Oracle inheritance is structured. This enables flexibility and customization yet keeps to certain boundaries to ensure security.



Oracle Inheritance Map

The contracts in **RED** are each examples of different oracle implementations that can be used/implemented for certain oneTokens. Each implements separate logic and can be used as a price feed for certain assets.

1. **UniswapOracleSimple.sol**: Averages observations over configurable (but unchangeable) time periods. Returns a price in a configurable (but unchangeable) token. Multiple instances can support multiple time-periods or different index tokens. A single instance can be shared and has the ability to observe multiple quotes for multiple tokens using the same (unchangeable) time-period and index currency. Only Oracles that return quotes in registered Collateral tokens can be registered in the OneTokenFactory where it is assumed that all registered Oracles return a USD quote.

2. **ICHIPeggedOracle.sol**: Returns 1:1 without consulting external sources. Useful for gas optimization if the peg is assumed to be very strong.
3. **ICHICompositeOracle.sol**: Composes quotes from 2 or more other Oracles. For example, token:ETH feeding into ETH:USD would return a token:USD by executing both steps in series.

oneToken Governance determines which Oracle to use for each token in the oneToken Vault and sets the values of parameters the Oracle needs. Multiple different oneToken Vaults can share the same Oracle.

Mint Masters

Minting Ratio for oneTokens

The Mint Master is singularly concerned with one action: computing a Minting Ratio for a given oneToken. It computes the Minting Ratio using internally-defined logic based on observable on-chain data within or without the ICHI system.

Minting Ratio

The ratio of Collateral to project tokens required to mint a oneToken. For example, oneBTC at a 91% minting ratio would be minted with 91% USDC and 9% wBTC. The computation of the Minting Ratio is handled by external modules that are admitted by ICHI Governance and adopted into oneToken Vaults by their respective oneToken Governance.

Every oneToken has a **Minimum Minting Ratio** which is the minimum percentage of stablecoin that needs to be used to mint new oneTokens. oneToken holders can vote to adjust the Minimum Minting Ratio using the voting power calculated by the oneToken Governance contract.

Incremental Mint Master Implementation

Similar to other components of the oneToken system, Mint Masters are modular and enable minting logic to be customized for each oneToken community's needs. the Incremental Mint Master is an example of a simple Mint Master that can be implemented for a oneToken instance.

The Incremental Mint Master implements a Minting Step Change which controls the amount a minting ratio can change. A change to the minting ratio happens everytime: (1) Someone mints a oneToken, (2) someone redeems a oneToken. Whether the price moves up or down depends on whether the oneToken price is slightly below/above \$1. In this instance of a Mint Master:

- **Lowering** the Minting Ratio decreases the portion of value to mint that must be supplied by the user in the form of Collateral tokens, and increases the acceptable amount of the value to mint that can be supplied in the form of the Project Token - risk on.
- **Increasing** the Minting Ratio increases the portion of value to mint that must be supplied by the user in the form of Collateral tokens, and decreases the acceptable amount of the value to mint that can be supplied in the form of the Project Token - risk off.

✓ E.g. When the market value of the Project Token is in decline this has the effect of lowering the Community Treasury value which, if unchecked, could lead to a Reserve Ratio of less than 100%. By extension, the contract could become illiquid. In this case, the Minting Ratio increases automatically when the price of the oneToken is beneath \$1. The now higher Minimum Minting Ratio can accelerate a price adjustment as well as place a floor under the automatic adjustments. In both cases, increasing the ratio of Collateral to Project Tokens in the Community Treasury gradually (through minting transactions) adjusts the Collateral Ratio. As this is adjusted in favour of more Collateral versus Project Tokens, exposure to possible value decline in the Project Token is reduced (risk off scenario).



Risk on/Risk off opportunity with the Incremental Mint Master

Reminder: This is one possible instance of a Mint Master. The modularity of oneToken Architecture accommodates flexible design. Every oneToken has a Mint Master which can be shared with other oneToken instances.

Collateral Tokens

USD hard pegged stablecoins held in Collateral Reserve

Collateral Tokens are specific external ERC20 contracts with strong pegs to 1 USD. They serve three primary functions - minting oneTokens, redeeming oneTokens, and Collateral Ratio calculation.

Collateral in Minting and Redeeming oneTokens

Collateral Tokens are accepted and emitted in the Minting and Redemption processes. 0-n stablecoins are accepted in tandem with Project Token at a specific ratio, the Minting ratio, by the oneToken Vaults. Upon redemption of oneTokens, oneToken Vaults burn the oneTokens in return for stablecoins of equal value (Collateral Tokens) minus the redemption fee. Since more than one kind of stablecoin can exist in the oneToken Vault at any given time, multiple stablecoin options are always offered on a "while supplies last" basis.

✓ E.g. If the contract accepts USDC and USDT as Collateral then the user may be forced to accept multiple stablecoins when redeeming their oneToken. This would be the case if their oneToken holdings exceed the USD value of a certain stablecoin in the Collateral Reserve. Thus redeeming 100 oneSUSHI when the Collateral Reserve includes 75 USDC and 75 USDT, the redeemer could elect to get 75 USDC for 75 oneSUSHI in one transaction and 25 USDT for the other 25 oneSUSHI through a second redeem transaction.

Collateral Tokens are owned by the oneToken Vault. Admission of Collateral Tokens is up to ICHI Governance which administers the oneToken Vault and enforces boundaries over oneToken deployments.

i Note: Rebalancing Collateral Tokens could be accomplished manually if the oneToken Governance finds it beneficial, or automated as an ongoing process through a combination of Strategies and Controller logic.

Strategies

Purpose built contracts that enable automated deployment of Community Reserves

A Strategy is a modular contract that is purpose-built for deploying Collateral and Community Treasury funds, receiving multiple types of tokens, and reporting balances of each type of token it holds. These are one-time transactions, not ongoing processes, that can perform atomic actions on the Community Treasury and Collateral, usually involving one or more interactions with external staking and farming contracts. Strategies could entail like-kind trades that may be desirable in connection with a change of Collateral, staking assets, hedging, and many other asset allocation schemes. Strategy can be purpose-built to work with any external contracts and interact with multiple token types at any given time.

Characteristics and Limitations

1. Strategies must have functions to move funds around.
2. Strategies don't rely on whitelisted tokens.
3. Strategies can interact with multiple token types, but can only be assigned to one known token*.
4. Strategies automatically execute allocations of the assets allocated to them (by the Controller or oneToken Governance) from the oneToken Vault.

*A known token is one that has been registered to the oneToken Vault. This process includes configuration of the Oracles.

✅ E.g. The oneETH community has decided to put a Strategy in place that can provide ETH-ICHI to that respective pool on SushiSwap. They allocate 10% of their ETH and ICHI from their Treasury to the Strategy which will automatically deposit those tokens into the pool and get back LP tokens. At this stage the said Strategy may not be able to further deploy these LP tokens because it does not have that capability, depending on the developer's preference for modularity or completeness. The Controller could instruct the Strategy to send those LP tokens back to the oneETH Vault and for the Vault to send those to another Strategy focused on using those LP tokens to farm and receive yield for the oneETH

treasury. Strategy allowances (ERC20) facilitate the transfers and also give Controllers an indication of governance objectives. For example, Strategy A with LP tokens and an LP token allowance of zero, plus Strategy B with an infinite LP token allowance could be interpreted by a Controller as an indication that governance wants to move the LP tokens from Strategy A to Strategy B when feasible and affordable (gas). Controllers can use any specialized logic to determine actions.

Similar to the other modular components in the ICHI and oneToken system, Strategies will be admitted via the ICHI Governance and selected by oneToken Governance. oneTokens assign 0-1 strategies per known token which can help a UI value tokens in the Vault. While a Strategy can interact with multiple tokens, the logic is specified to a single known token within the Vault.

Controller

Fund allocation and management within the Decentralized Monetary Authority

The Controller's main function is to supervise and automate the transfer of funds between oneToken Vaults and Strategies. It can examine balances, other factors in the system, and any internal parameters (based on the Controller implementation) in order to rebalance funds. These configurable parameters do not need to be normalized across multiple Controller implementations.

Controllers can be reused across multiple oneToken instances and oneTokens can change Controllers. Each Controller is customized based on the features oneToken Governance wants to use.

Contracts

ICHI and oneToken Smart Contracts

Core ICHI (Mainnet)

Contract	Mainnet Address
ICHI	0x903bEF1736CDdf2A537176cf3C64579C3867A881
ICHISTake (xICHI)	0x70605a6457B0A8fBf1EEE896911895296eAB467E
oneTokens	
OneTokenFactory	0xd0092632b9ac5a7856664eec1abb6e3403a6a36a
Basic Null Controller	0x81c9932bd9a87e454710ef83551ac32dd808630e
Incremental Mint Master	0x58254B405E85359Fc7Eb3b8856bA82A4dD7C82E2

oneTokens (Mainnet)

Contract	Mainnet Address
V2	
oneUNI	0x8290d7a64f25e6b5002d98367e8367c1b532b534
oneUNI Strategy	0x6287d56e246eee33bead2d7dd3a99db693f4554c
onePERL	0xd9a24485e71b9148e0fd51f0162072099df0db67
onePERL Strategy	0x2Dfb5348CC20218426e566C1bD7B8b3789CBa9d5
PERL Oracle	0x3134CB69297C965CAf2aC5C4FDb46B4a77352439
oneMPH	0xBE3F88E18BE3944FdDa830695228ADBB82fA125F
oneMPH Strategy	0xf1587cb51349cdf5bb408845249de36466c35f41

MPH Oracle	0x0220864A5C899B0848a5797ca84B34CC494293cA
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Core ICHI (Kovan Testnet)

Contract	Mainnet Address
oneToken Factory	0x6a47Dd32FC2737De5881d63FeC9f27670297fbE5
Incremental Mint Master	0x17262ba85266FEdbDF3D22Eee5414ef77045Ff0a
Null Controller	0xE5e6Ba3629DC563942578623992aC08A64142aCF

Grants

Organizations who provided grants to ICHI.

Amount

Reference		
Accomplice Blockchain and Collider Ventures	\$200k + \$200k liquidity provision	Snapshot
Moonbeam	5k \$RIVER and 5k \$GLMR	Snapshot
Wing	1,500 \$WING	Snapshot
Strudel	1 \$VBTC + \$10k \$USDC	Snapshot
Solana	Development Cost	

Liquidity Providers

Organizations providing liquidity incentives to ICHI

IchI related token pools have been selected by multiple third party protocols for additional rewards of oneToken or ICHI pairs.

Provider	Amount	Reference
Loopring	20% boost in \$LRC rewards	Snapshot
1inch	\$500k \$1INCH	Snapshot

Audits

Third Party audits of ICHI


There have been five audits of ichi.farm, listed from most recent:

1. Quantstamp: <https://github.com/ichifarm/ichi-oneToken/blob/master/audits/quantstamp/audit.pdf>
2. Solidified: <https://github.com/ichifarm/ichi-oneToken/blob/master/audits/solidified/audit.pdf>
3. CertiK: <https://t.co/bLYbCl4vds>
4. defiyield.info: <https://defiyield.app/audits/defiyield/ichi>
5. Bramah Systems: <https://github.com/ichifarm/audit>



Remember, no audit can catch all problems. Please review the risks tab to understand the risks involved with participating on ichi.farm.

Risks

 Providing liquidity to ichi.farm or minting stable coins on ichi.farm is not without risks. Please don't supply your life savings, or assets you can't afford to lose, to ichi.farm.

Minting

When minting ichi.farm stable coins, you are exposed to some risks:

1. Smart contract issues, bugs, or economic loopholes/exploits with the ichi.farm protocol
2. Risks with the digital assets used as collateral, typically stable coins:
 - Maker Dao risks: <https://makerdao.com/en/whitepaper/#risk-parameters-controlled-by-maker-governance>
 - USDC risks: <https://support.usdc.circle.com/hc/en-us/articles/360001314526-Circle-USDC-Risk-Factors>
 - USDT risks: <https://tether.to/legal/>
3. Market, trading, liquidity, and exchange risks associated with non-collateral, cryptocurrency assets
4. Governance risks: Governance could make poor decisions on treasury management or important stable coin parameters, such as minimum reserve percentage

Liquidity Provision

When providing liquidity to the ichi.farm exchange, you are exposed to many risks:

- Smart contract issues
- Impermanent loss: <https://cointelegraph.com/news/report-impermanent-loss-on-uniswap-and-other-amms-is-always-permanent>
- Market, trading, liquidity, and exchange risks

Farming

When staking liquidity pool tokens to get ICHI, the ichi.farm governance token, you are exposed to many risks:

- Smart contract issues
- Market, trading, liquidity, and exchange risks

ICHI Concepts

Keywords used in the ICHI ecosystem

Keyword	Definition
ICHI	Governance token of the ICHI community.
xICHI	A representation of the share of staked ICHI. The value of xICHI will increase in terms of ICHI as additional ICHI is paid to the xICHI contract.
ICHI Governance	Overarching governance of the ICHI system. ICHI uses community voting. Voters (ICHI holders) make decisions based on Proposals which then instruct multiple signers to use a multisig to act as governance. In the contracts, governance is implemented as a single signer. ICHI Governance also has the ability to set boundaries for oneTokens.
Decentralized Monetary Authority (DMA)	Enabled through innovations in smart contracts and AMMs, DMAs provide any community with a set of audited contracts that allow them to manage their own stable currency in the same way a central bank manages the currency of a country. Through the separation of smart contract deployments and token issuance DMAs put both issuance and governance rights directly in the hands of community members.

oneToken Concepts

Keywords used in the oneToken ecosystem

Keyword	Definition
oneToken System	An instance of modular contracts used to create a community stable coin governed by oneTokenGovernance.
oneTokens	Produced stable tokens which are created for cryptocurrency communities backed by both a collateral reserve and community treasury.
Collateral	Existing stablecoins that maintain a hard peg to USD. You may claim \$1 of collateral reserves when redeeming an ICHI stablecoin while supplies last. oneTokens can accept multiple stablecoins for Collateral. Therefore, the amount of each stablecoin is an upper limit of how much can be redeemed of that specific stablecoin. E.g. If the contract accepts USDC or USDT as Collateral then the user may be forced to accept multiple stablecoins when redeeming if their oneToken holdings are larger than the Collateral of a single stablecoin.
Collateral Reserve	The USD value of the collateral.
Member Coin	Cryptocurrencies that have their own oneToken (an ICHI stablecoin).

Community Treasury	The USD value of the non-collateral assets (including Member Coins) for a specific oneToken.
oneToken Governance	Governance of specific oneToken instances with user votes weighted by their holdings of the corresponding oneTokens in specific liquidity pools. oneTokenGovernance can replace oneToken modules or upgrade the core contract using the Proxy pattern. NOTE: This is external (from the perspective of these contracts), the "owner" and signer of these actions is a singleton. Decisions that were voted on go to trustees who use a multisig wallet to sign transactions that administer the oneToken instance.
Minting oneTokens	Providing stablecoins + member coins at the defined minting ratio in order to receive oneTokens.
Minting Ratio	The percentage of Collateral required to mint a oneToken. For example, oneBTC at a 91% minting ratio would be minted with 91% USDC and 9% WBTC. The Minting Ratio goes up/down based on what the Mint Master module decides to do. This is intentionally modular to allow for different logic to be applied.

Architecture Components

Component	Function
oneToken Factory	A contract that acts as a oneToken deployment mechanism. Global (ICHI)

	state information is stored and managed in this system-wide hub.
oneToken Governance	Governance of specific oneToken instances with user votes weighted by their holdings of the corresponding oneTokens in specific liquidity pools. oneTokenGovernance can replace oneToken modules or upgrade the core contract using the Proxy pattern.
oneToken Vault	The core upgradeable (through a Proxy upgrade) contract owned by oneToken Governance that holds assets, mints and burns ERC20 tokens, and controls the process flow during the minting and redemption process, including coordinating modularized components.
Versions	oneToken Vault implementations that are published by deployers and admitted to the network by ICHI Governance. oneToken Governance can optionally adopt (upgrade, downgrade) an approved version of the oneTokenVault.
Oracles	Price feed modules that report the value of assets in the oneToken Vault through a normalized interface. The oneToken Vault passes Oracle price conclusions and volatility signals to Mint Master modules.
MintMaster	A Mint Master uses any available information to compute the current minting ratio. The Minting Ratio adjusts over time to maintain the exchange rate peg of a oneToken to 1 USD. The interface includes a maximum transaction volume figure (can be infinite) to

	<p>accommodate anticipated future logic requirements. Since the rate can be up to 100% and the maximum volume can be as low as zero, the Mint Master can be a circuit-breaker if so desired. Oracles report volatility. MintMasters decide what to do.</p>
Collateral Tokens	<p>0-n stablecoins that are accepted in tandem with Member Tokens at the Minting Ratio, by the oneToken Vaults. Upon redemption of oneTokens, oneToken Vaults burn the oneTokens in return for stablecoins of equal value (Collateral Tokens). Since more than one kind of stablecoin can exist in the oneToken Vault at any given time, multiple stablecoin options can be given upon redemption. While there will likely be sufficient Collateral to back all outstanding oneTokens, each specific stablecoin is redeemable on a "while supplies last" basis.</p>
Strategies	<p>Trading contracts that invest funds in yield-farming contracts, receive other types of tokens and report balances of each type of token they hold. A Strategy interfaces with a oneToken contract through the Controller. The interface to the Controller defines the minimum viable requirements to be a compatible contract. Strategies will be admitted via the ICHI Governance and selected by oneToken Governance.</p>

Controller

A global contract that executes the appointed strategies for a given oneToken Vault at the specified period of time. The Controller also implements system-wide invariants such as enforcing conservation of value or allowable fees/slippage rules.

DeFi Concepts

Decentralized Finance concepts and their definitions/relevance to ICHI

Keyword	Definition
Stablecoin	A coin designed to remain at \$1 of value. You may mint stablecoins by depositing \$1 of value in two parts: part collateral coins, part member coins. These are typically named oneX where X is the member coin. For example, oneBTC is Bitcoin's stablecoin and oneETH is Ethereum's stablecoin.
Liquidity Pool	Multi-asset pools of crypto that enable swapping between the respective assets in those pools. ICHI leverages liquidity pools to maintain the price of stablecoins. Here is a resource that explains this concept: https://uniswap.org/docs/v2/core-concepts/pools/
Liquidity Farm	ICHI sponsored farms that enable liquidity providers to earn rewards for depositing LP tokens from said pools.

Frequently Asked Questions

Frequently Asked Questions about ICHI and oneTokens

ICHI

ICHI is a self-sustaining, community governed platform that enables any third party cryptocurrency community to create and govern their own in-house, non-custodial **oneToken** (a stablecoin valued at \$1) with a **Decentralized Monetary Authority (DMA)**.

What was ICHI V1?

ICHI V1 was a pilot project that demonstrated the feasibility of a new stablecoin design. It launched successful stablecoins for large cap (Bitcoin, Ethereum, and Chainlink), mid cap (Wing.finance) and small cap (Strudel.finance) cryptocurrency communities. Each of these stablecoins remained pegged to \$1 during the Q1 2021 bull market and the May 2021 market correction. These V1 stablecoins will continue to work indefinitely on the Ethereum network as unstoppable financial infrastructure. (Find ICHI V1 at <https://www.ichi.farm/>)

How is ICHI V2 different?

The defining concept of ICHI V2 is a Decentralized Monetary Authority (DMA). DMAs give any cryptocurrency community the ability to hold their scarce cryptocurrency which they believe will increase in value over time (store of value) while also governing their own oneToken (an ICHI stablecoin). Their oneToken will provide their community with USD exposure in decentralized finance, the ability to transact with stable currency, and adoption discounts and incentives. A community no longer needs to pay their own scarce project tokens in exchange for stablecoins created by other communities or institutions. (Find ICHI V2 at <https://app.ichi.org/>)

What are ICHI rewards?

ICHI rewards are distributed with every block on the Ethereum network at a current rate of 0.25 ICHI/block. 50% of the rewards are distributed to liquidity providers for oneToken pools while the other 50% of rewards are distributed to liquidity providers for Ichi pools. The oneToken pools are rewarded proportional to the number of oneTokens minted while the Ichi pools are rewarded proportional to the amount of non-Ichi liquidity.

How do I earn ICHI rewards?

Anyone who participates in yield farming by providing liquidity to oneToken or Ichi liquidity pairs can earn ICHI rewards (i.e. farming).

Who is behind ICHI? When did it start?

The total 5 million ICHI was minted in November of 2020 as a completely fair launch with no pre-mines, ability to create more ICHI, and community driven governance from day 1.

Since that launch, the Ichi community has hired full time staff with experience from Amazon, IBM, Microsoft, as well as multiple DeFi and crypto-native projects.

What are ICHI halvings?

An ICHI halving event is when the rewards for farming ICHI are cut in half. ICHI halvings happen when the ICHI community puts forward a proposal to have a halving and passes it. Learn more on the Halvings page.

Can the ICHI treasury be used on things other than farming?

Yes, the ICHI treasury can be used on any proposal passed by the ICHI community. Learn more at on the Community Treasury page.

When does xICHI get paid ICHI? Can I see an APY?

xICHI holders who have participated can be rewarded by oneToken treasuries, in proportion to their contributions. There is no specified schedule or even guarantee of such rewards. Rewards to xICHI holders are announced via Telegram and can be found in the Week In Review (WIR) posts on ICHI's Medium.

What is the ICHI token? How many are there?

ICHI is the governance token required for voting and provided as an incentive in the Ichi community. ICHI is hard capped at 5 million tokens and is distributed to liquidity providers on a per block basis on Ethereum.

How can you afford to pay such high APYs?

APYs are calculated based on the trading fees and token incentives which accrue to liquidity providers for specific liquidity pools. The APY is calculated off of the historical data in each of these categories meaning that it is a point in time approximation.

How does ICHI earn rewards?

Each oneToken community can elect to establish yield generating positions with their collateral reserves or community treasuries. As these positions earn yield, they may choose to reward ICHI holders for participating in governance proposals. Only users who have participated in submission of proposals, commenting, reviewing and/or voting will be entitled to receive ICHI token governance rewards.

How do I report a bug or an issue? Is there a bug bounty?

Issues can be opened on our Github repo or emailed to core@ichi.org. Validated bugs or exploits will be provided a reward.

oneTokens

oneTokens provide the hard peg of centralized stablecoins without sacrificing on decentralization. oneTokens keep their value at \$1, are purely on-chain, and accrue a community treasury in each oneToken's cryptocurrency.

How is it possible to mint a new ICHI stablecoin for \$1 of value?

Decentralized oracles (live price feeds provided by networks of computers) determine the price of two assets in US dollars: USDC (a stablecoin issued by regulated financial institutions, backed by fully reserved assets, and redeemable on a 1:1 basis for US dollars) and the project tokens. You mint a new stablecoin by paying exactly 1 US dollar in two parts (part USDC and part project tokens) as calculated by these oracles.

How is it possible to redeem an ICHI stablecoin for \$1 of value?

You redeem a stablecoin for exactly 1 US dollar of USDC, less a redemption fee. The price of USDC in US dollars is provided by decentralized oracles.

Why can't you just use the cryptocurrency (ie, Bitcoin) to do business activity?

You can't grow a business without the ability to predictably pay expenses, control risk, and/or set aside funds for taxes. That makes volatile, scarce coins unusable for real business. At the same time, it hurts every time you sell a coin for fiat currencies (money issued by governments rather than software) or stablecoins don't economically drive the value of that coin's treasury. ICHI makes it possible to community hodl (hold your coins rather than selling them) your favorite coin while also doing real business.

What does 100% on-chain mean?

You can see the USDC collateral and the coins paid to mint on the Ethereum blockchain as well as the entire transaction history of minting, redeeming, and any treasury actions.

If the coins or USDC are used by the coin's community to create DeFi (decentralized finance positions), you can see these transactions and positions in the corresponding smart contracts.

What is the community treasury?

You pay in project tokens to mint that project's stablecoin. These coins remain in a community treasury because you only get back USDC when you redeem the coin's stablecoins. The coin's community decides what to do with this treasury by voting with the stablecoin itself. A common action may include selling part of the community treasury to buy more USDC and deposit it back into the stablecoin's USDC collateral.

How does a community profit from a DMA?

Communities that create their own stablecoin with a DMA are able to introduce a stable medium of exchange for their economy without having to dispose of their native project tokens.

DMA's enable communities to:

- Create their own decentralized stablecoin
- Create a community treasury to incentivize adoption
- Earn yield on their own stablecoin
- Increase total value locked in their community

Where can I use these oneTokens to do business? Why would anyone accept them?

There are three major markets for stablecoins: decentralized applications (DeFi), cryptocurrency applications (centralized exchanges, wallets, etc), and consumer applications (online shopping, everyday goods and services). Users will mint the first \$10B stablecoins for DeFi, the next \$100B for cryptocurrency applications, and trillions for consumer applications. This will take time but the community treasuries are able to power the incentives and discounts necessary to make this happen.

What happens if the scarce crypto goes down in value?

Ichi requires a minimum treasury reserve ratio of 150% in order to ensure 100% of oneToken redemption at \$1. Decreases in scarce crypto value which put this ratio at risk should result in purchasing of additional collateral tokens or unwinding of yield bearing positions.

In the May market volatility all oneTokens were able to maintain their pegs to exactly \$1 while few other stablecoins did.